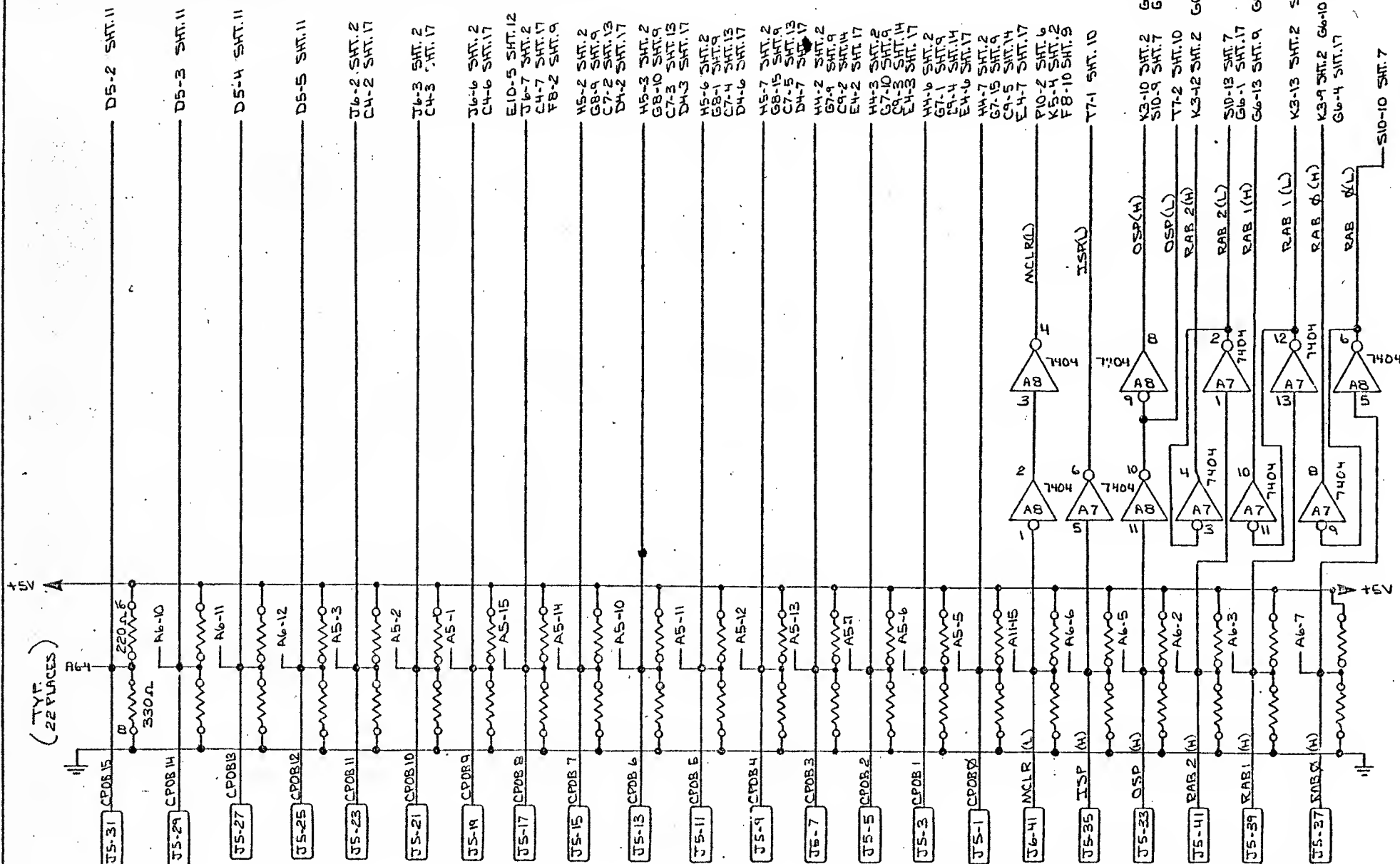


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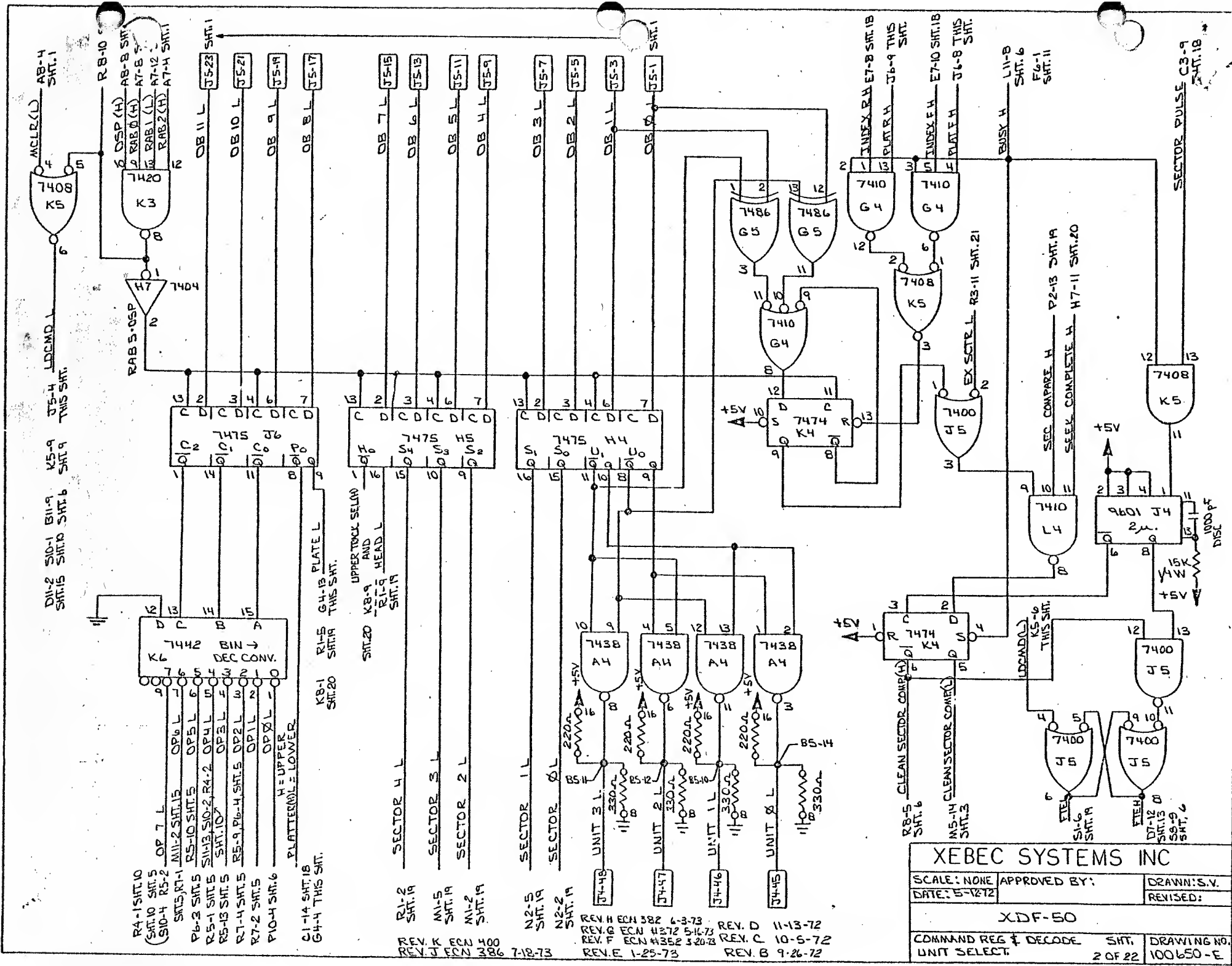
REV. K ECN 400 7-30-73
 REV. J ECN 386 7-18-73
 REV. H ECN 382 6-3-73
 REV. G ECN 372 5-16-73
 REV. F ECN #352 3-20-73
 REV. E 1-25-73
 REV. D 11-13-72
 REV. C 10-5-72
 REV. B 9-26-72

XEBEC SYSTEMS INC

SCALE: NONE APPROVED BY: DRAWN: SV
 DATE: 5-12-72 REVISED:

XDF-50

SHT 10 OF 22 DRAWING NO. 100650-E

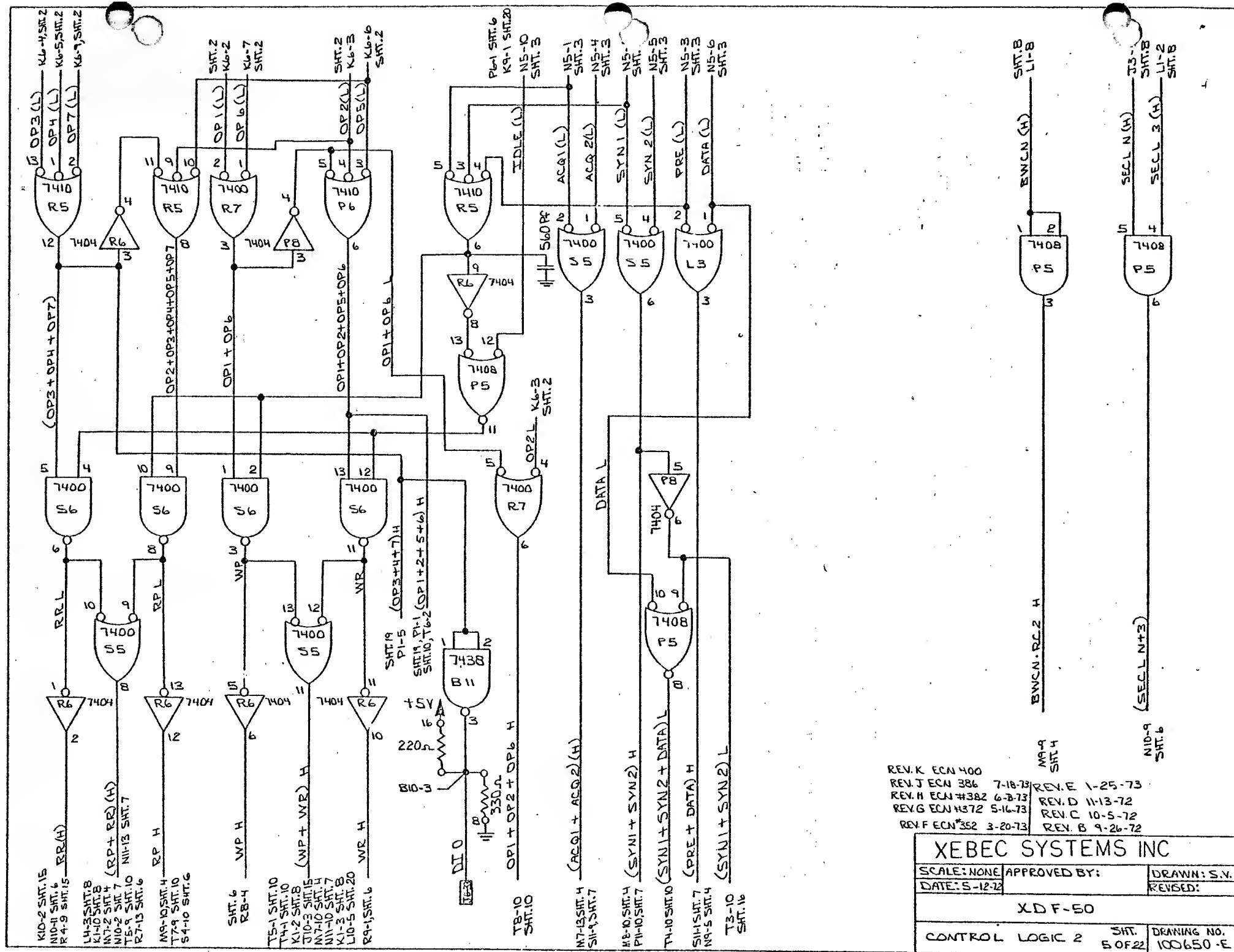


XEBEC SYSTEMS INC

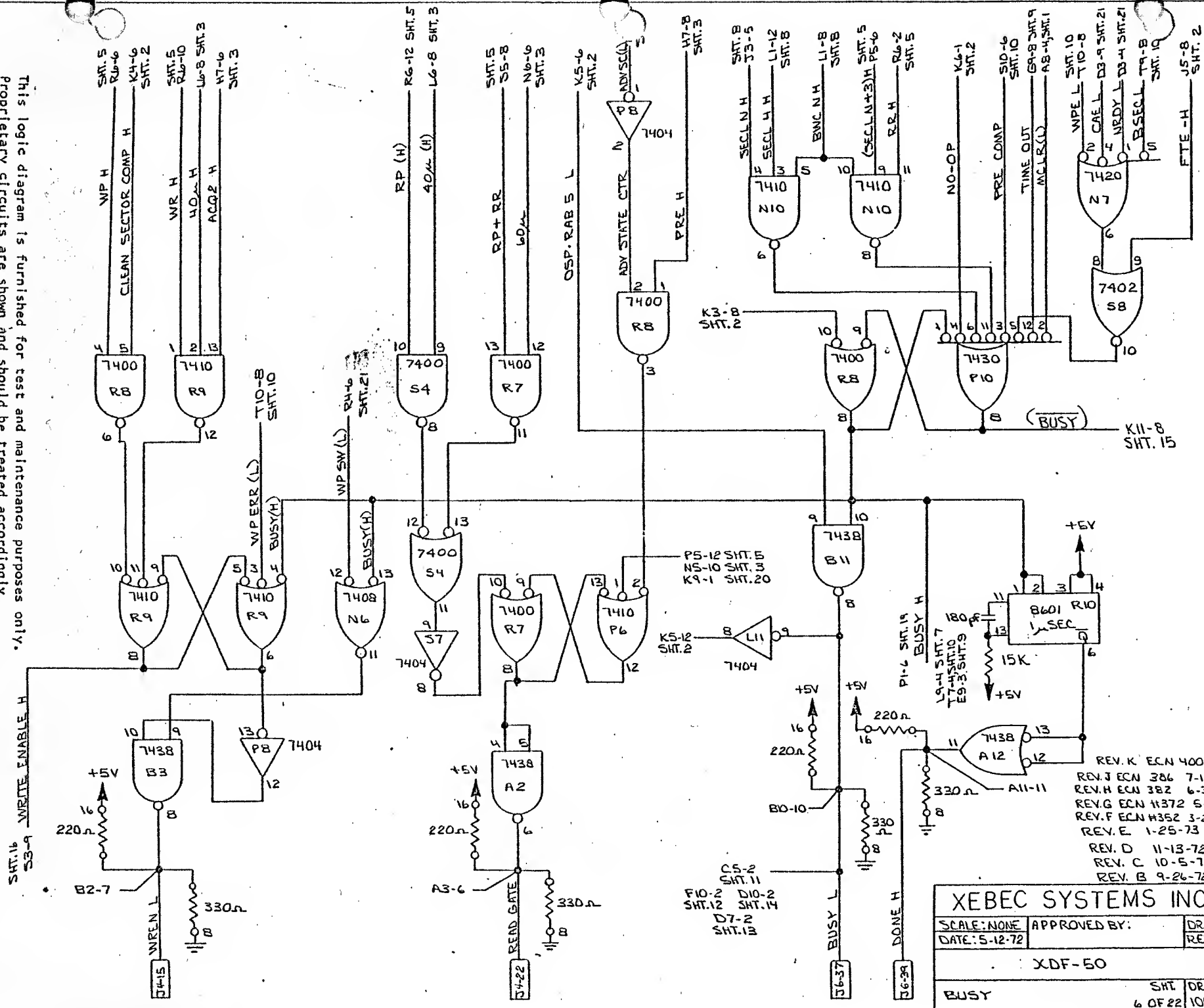
SCALE: NONE APPROVED BY: DRAWN: S.V.
DATE: 5-18-72 REVISED:

XDF-50

COMMAND REG & DECODE SHT. 2 OF 22 DRAWING NO. 100650-E

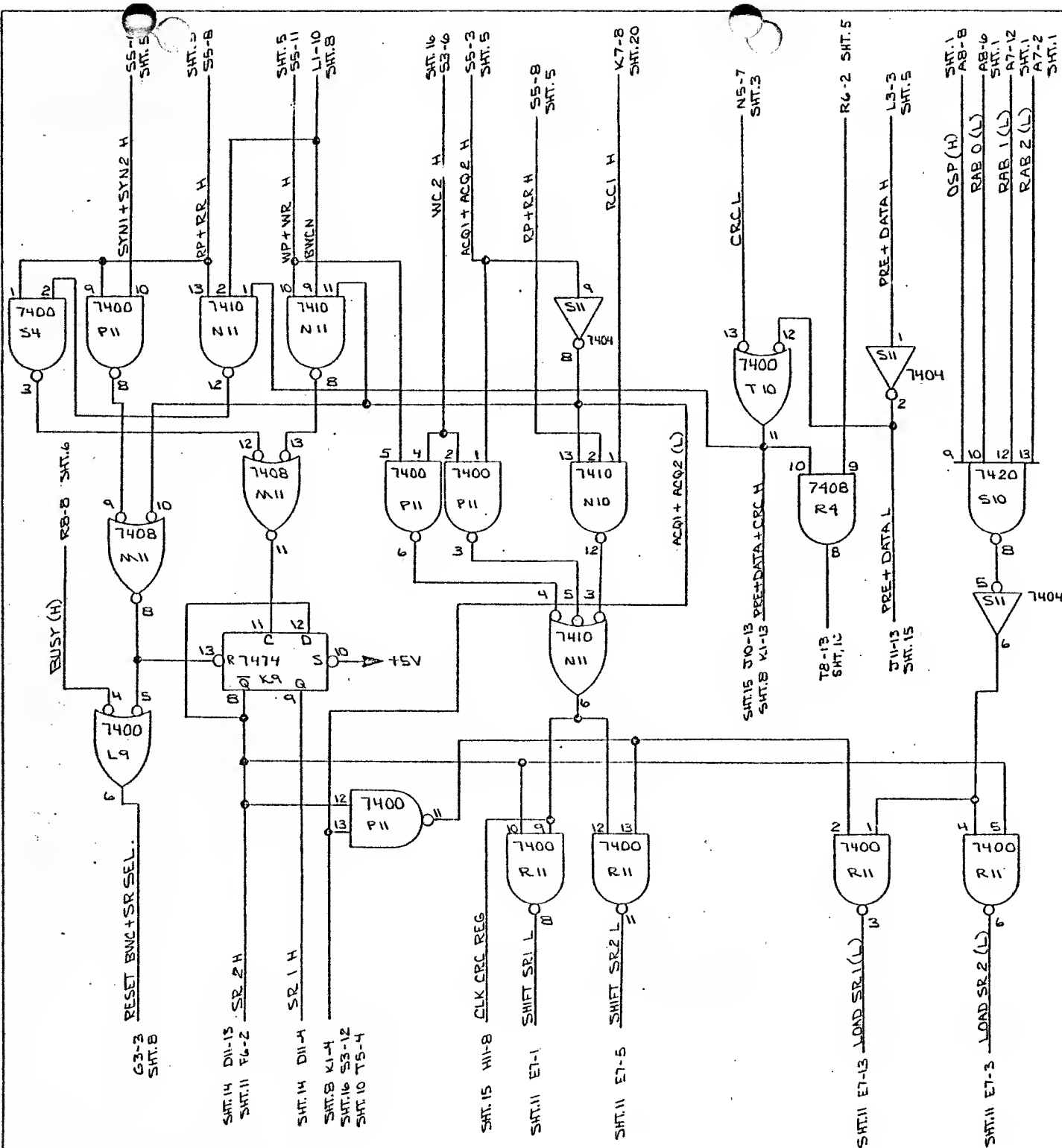


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XEBEC SYSTEMS INC		
SCALE: NONE	APPROVED BY:	DRAWN: S.V.
DATE: 5-12-72		REVISED:
XDF-50		
BUSY	SMT 6 OF 22	DRAWING NO. 100650-E

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REV. K ECN 400
REV. J ECN 386 7-18-73
REV. H ECN 382 6-3-73
REV. G ECN 11372 5-16-73
REV. F ECN 4252 3-20-73
REV. E 1-25-73
REV. D 11-13-72
REV. C 10-5-72
REV. B 9-26-72

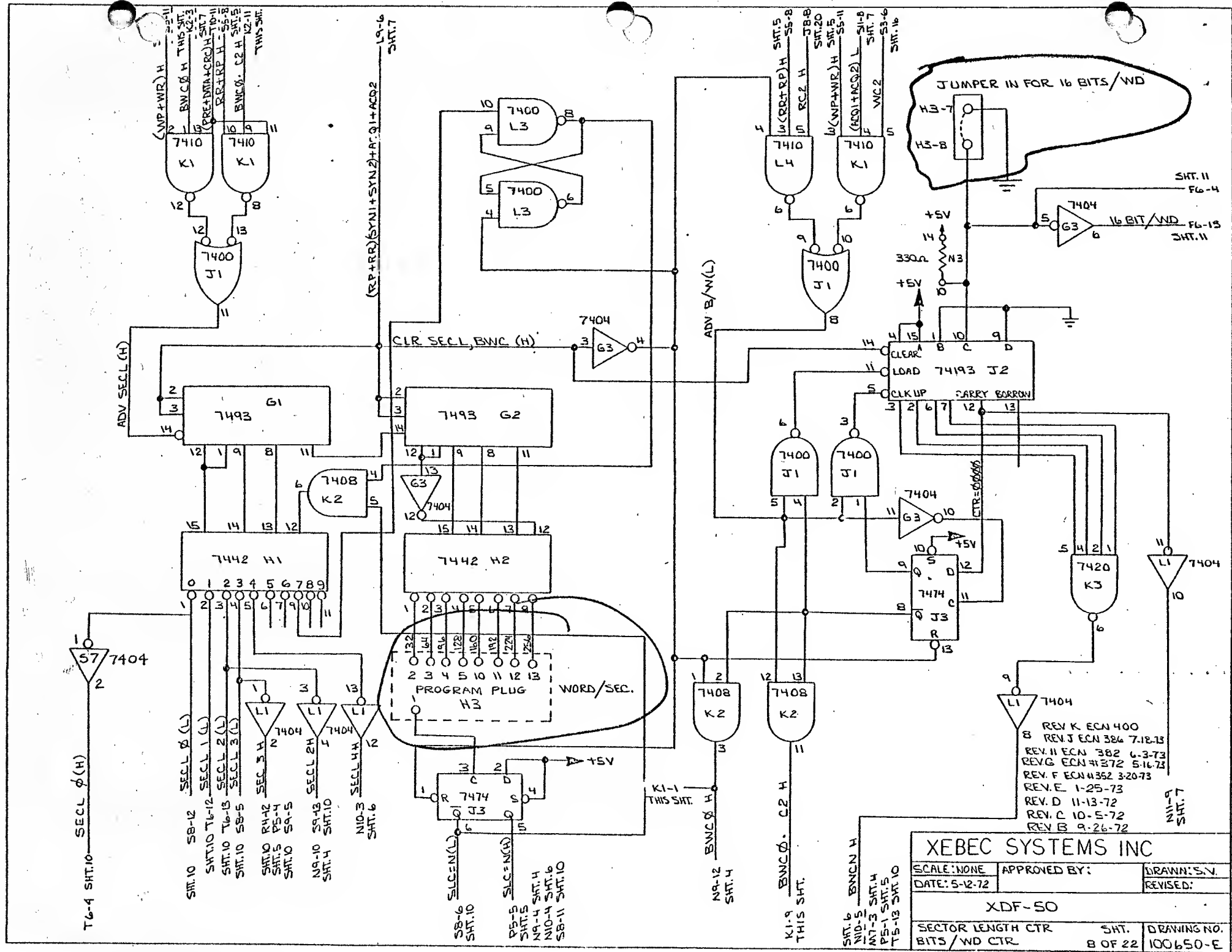
XEBEC SYSTEMS INC

SCALE: NONE	APPROVED BY:	DRAWN: S.V.
DATE: 5-12-72		REVISED:

XDF-50

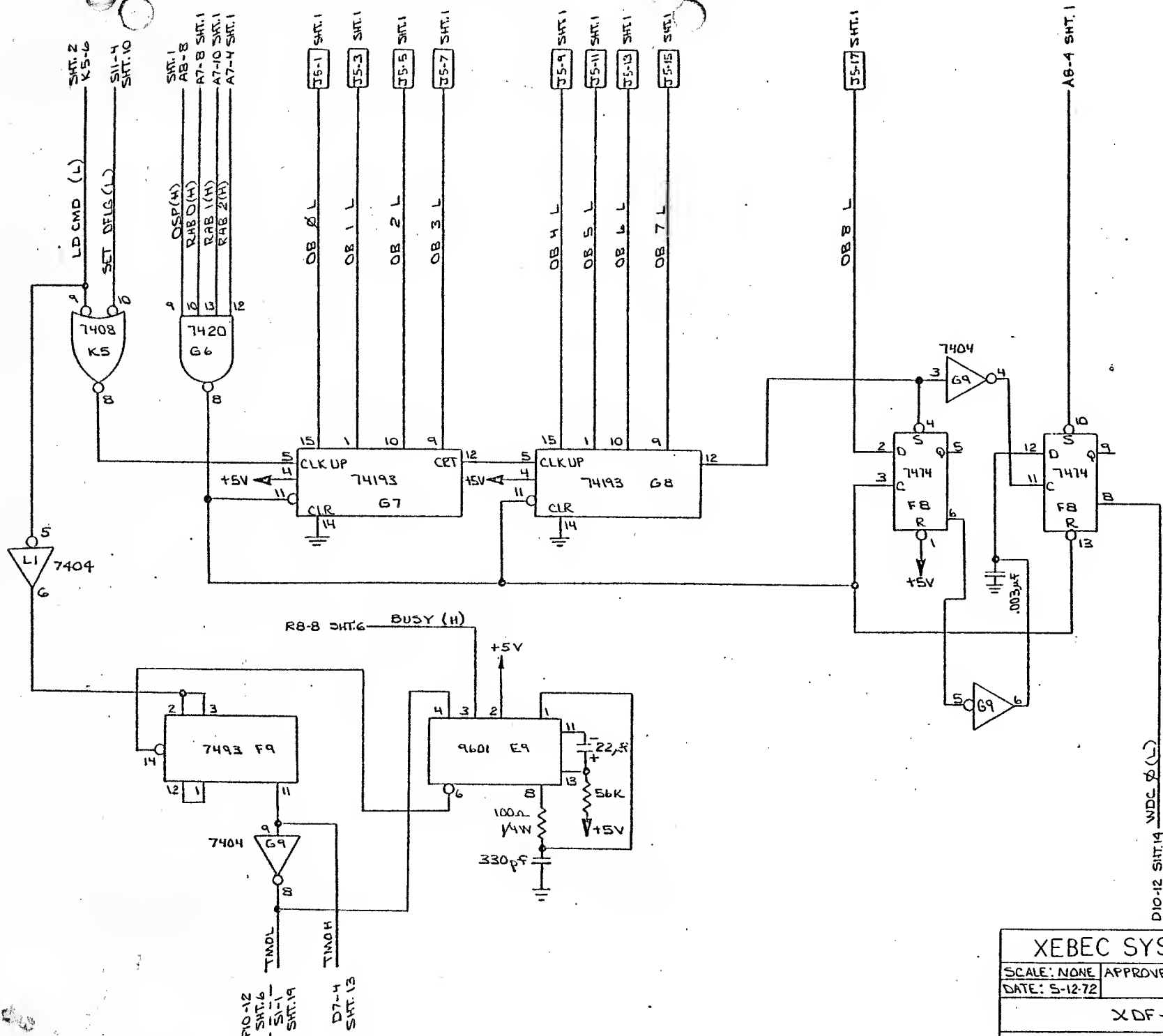
SHIFT REG. CONTROL

SHT.	DRAWING NO
7 OF 22	107650-1



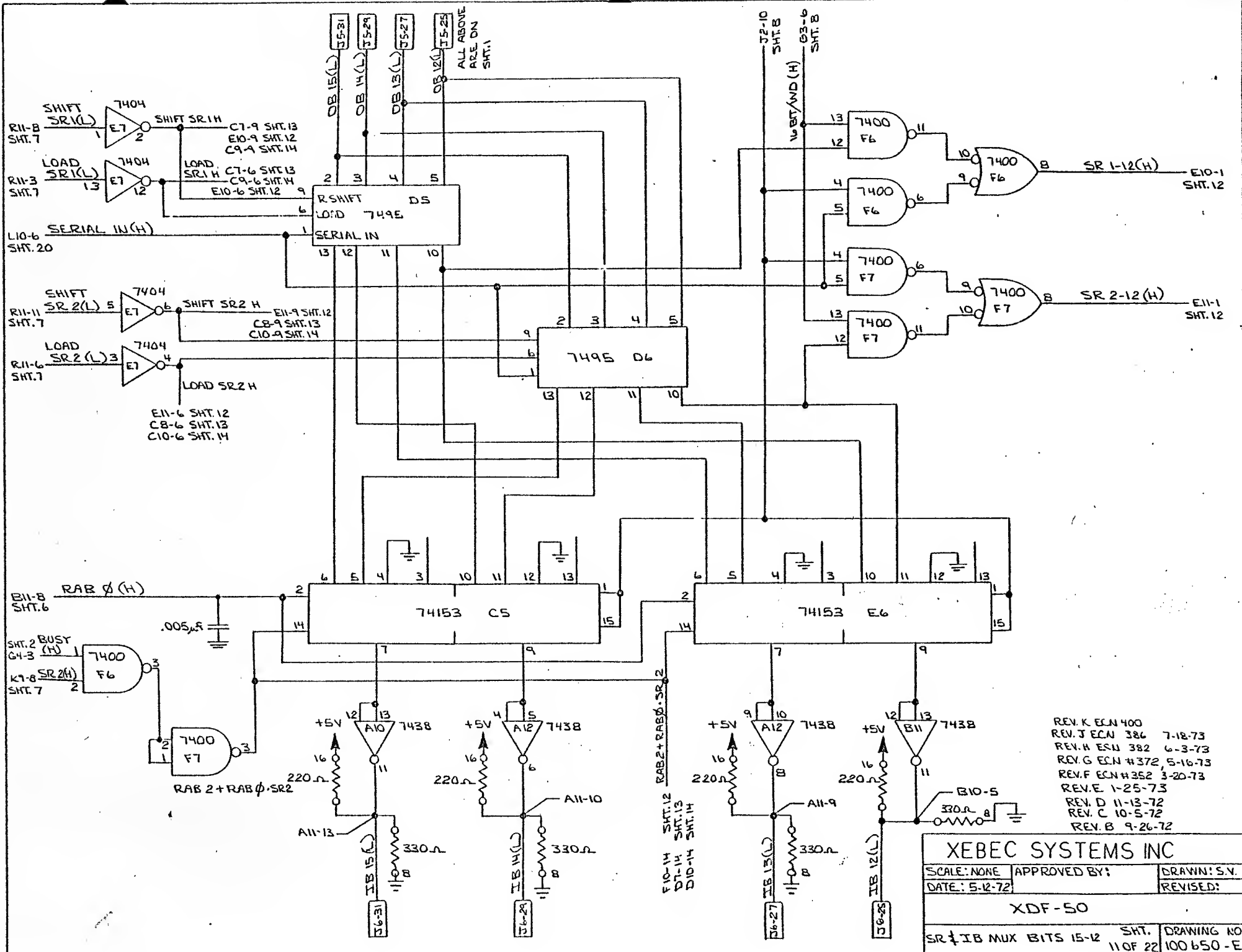
XEBEC SYSTEMS INC		
SCALE: NONE	APPROVED BY:	DRAWN: S.V.
DATE: 5-12-72		REVISED:
XDF-50		
SECTOR LENGTH CTR	SHT.	DRAWING NO.
BITS/WD CTR	B OF 22	100650-E

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REV. K ECN 400
 REV. J ECN 386 7-12-73
 REV. H ECN 382 6-3-73
 REV. G ECN 11372 5-16-73
 REV. F ECN 11352 3-20-73
 REV. E 1-25-73
 REV. D 11-13-72
 REV. C 10-5-72
 REV. B 9-26-72

XEBEC SYSTEMS INC		
SCALE: NONE	APPROVED BY:	DRAWN: S.V.
DATE: 5-12-72		REVISED:
XDF-50		
WORD COUNTER	SMT. 9 OF 22	DRAWING NO 100650-E



REV. K ECN 400
 REV. J ECN 386 7-18-73
 REV. H ECN 382 6-3-73
 REV. G ECN 372 5-16-73
 REV. F ECN 352 3-20-73
 REV. E 1-25-73
 REV. D 11-13-72
 REV. C 10-5-72
 REV. B 9-26-72

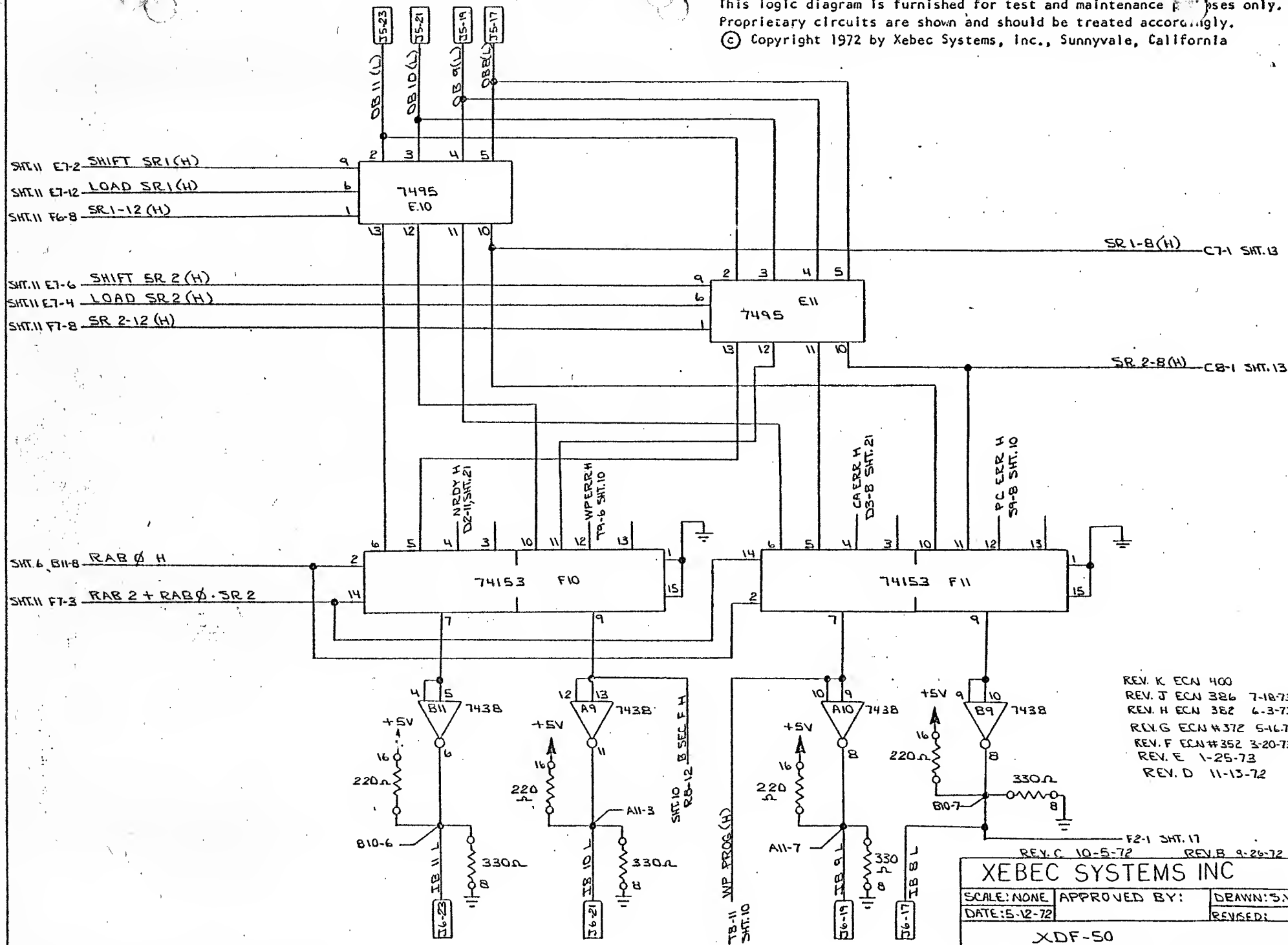
XEBEC SYSTEMS INC

SCALE: NONE	APPROVED BY:	DRAWN: S.V.
DATE: 5-12-72		REVISED:

XDF-50

SR 1 IB MUX BITS 15-12	SHT. 11 OF 22	DRAWING NO. 100650-E
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REV. K ECN 400
 REV. J ECN 386 7-18-73
 REV. H ECN 382 4-3-73
 REV. G ECN #372 5-16-73
 REV. F ECN #352 3-20-73
 REV. E 1-25-73
 REV. D 11-13-72

REV. C 10-5-72 REV. B 9-26-72

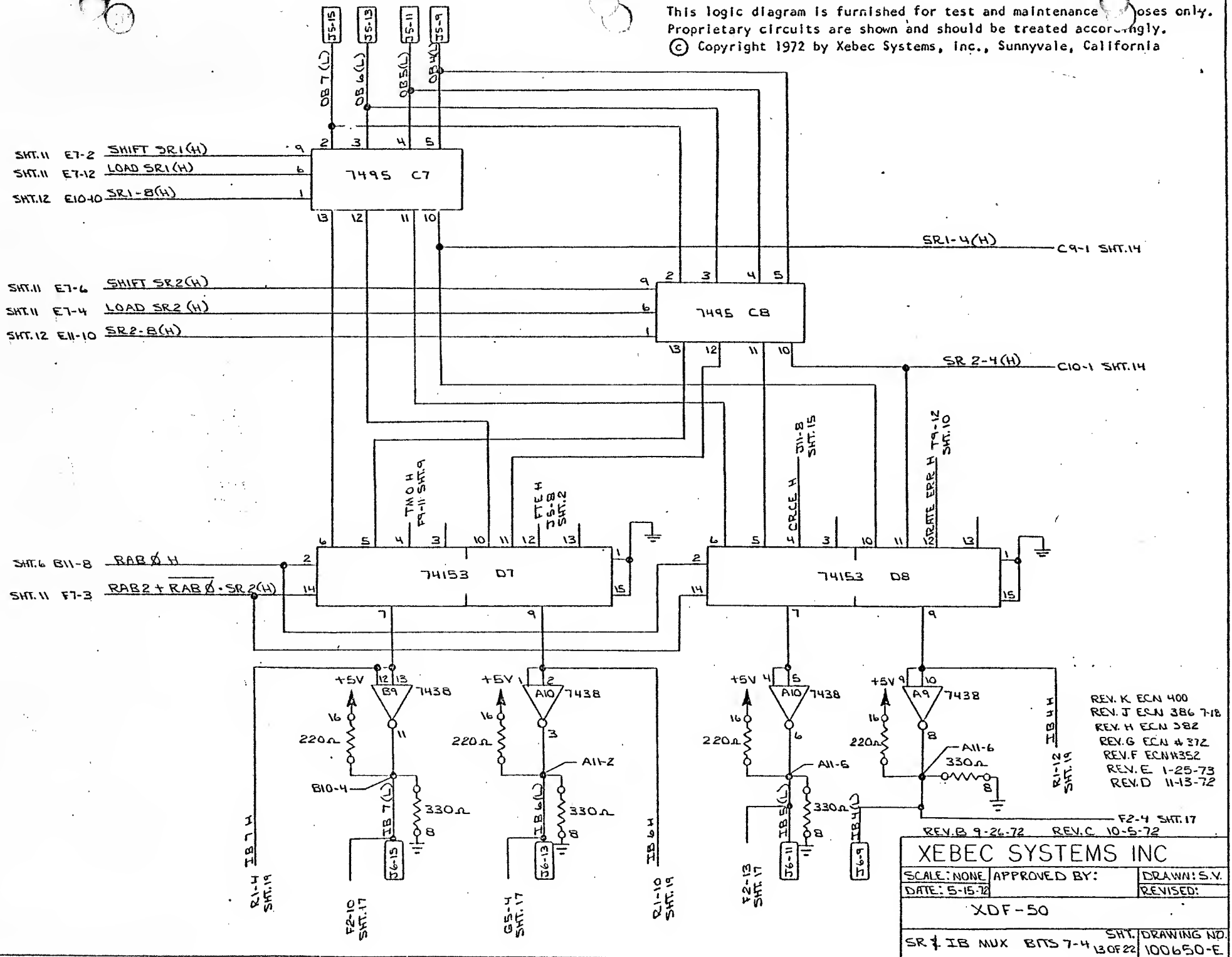
XEBEC SYSTEMS INC

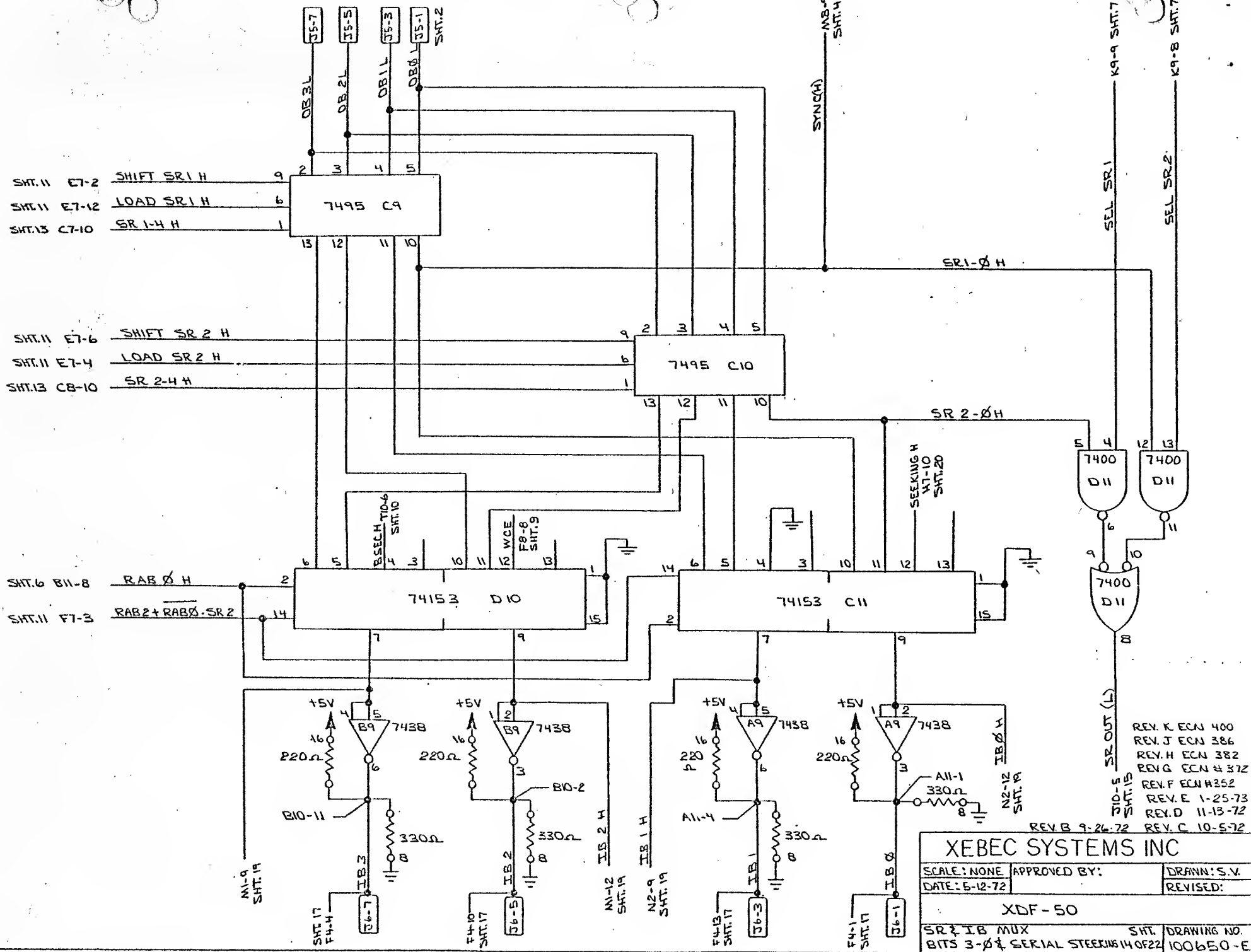
SCALE: NONE	APPROVED BY:	DRAWN: S.N.
DATE: 5-12-72		REVISED:

XDF-50

SR & IB MUX BTS 11-8 SHT. 12 OF 22 DRAWING NO. 100650-E

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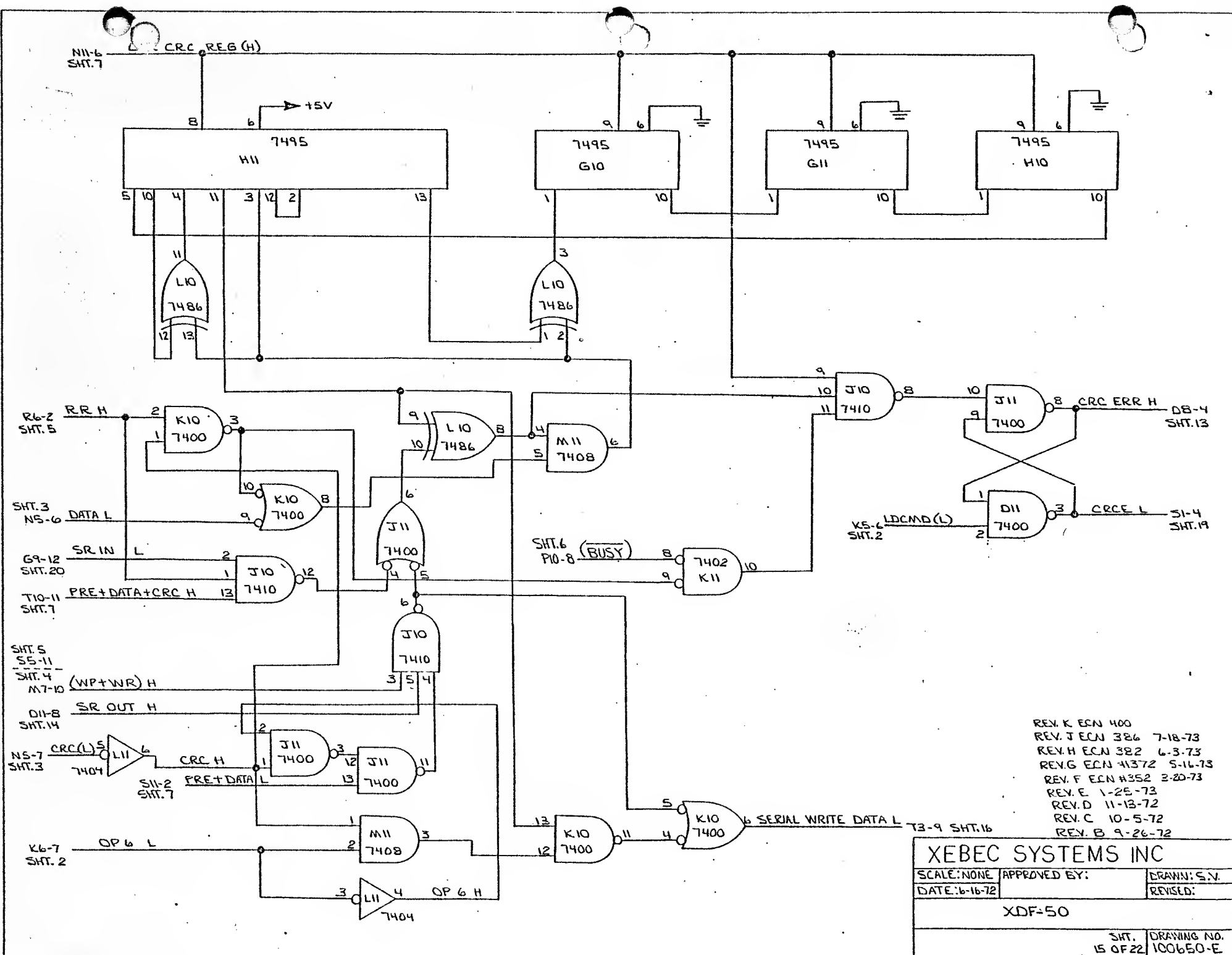


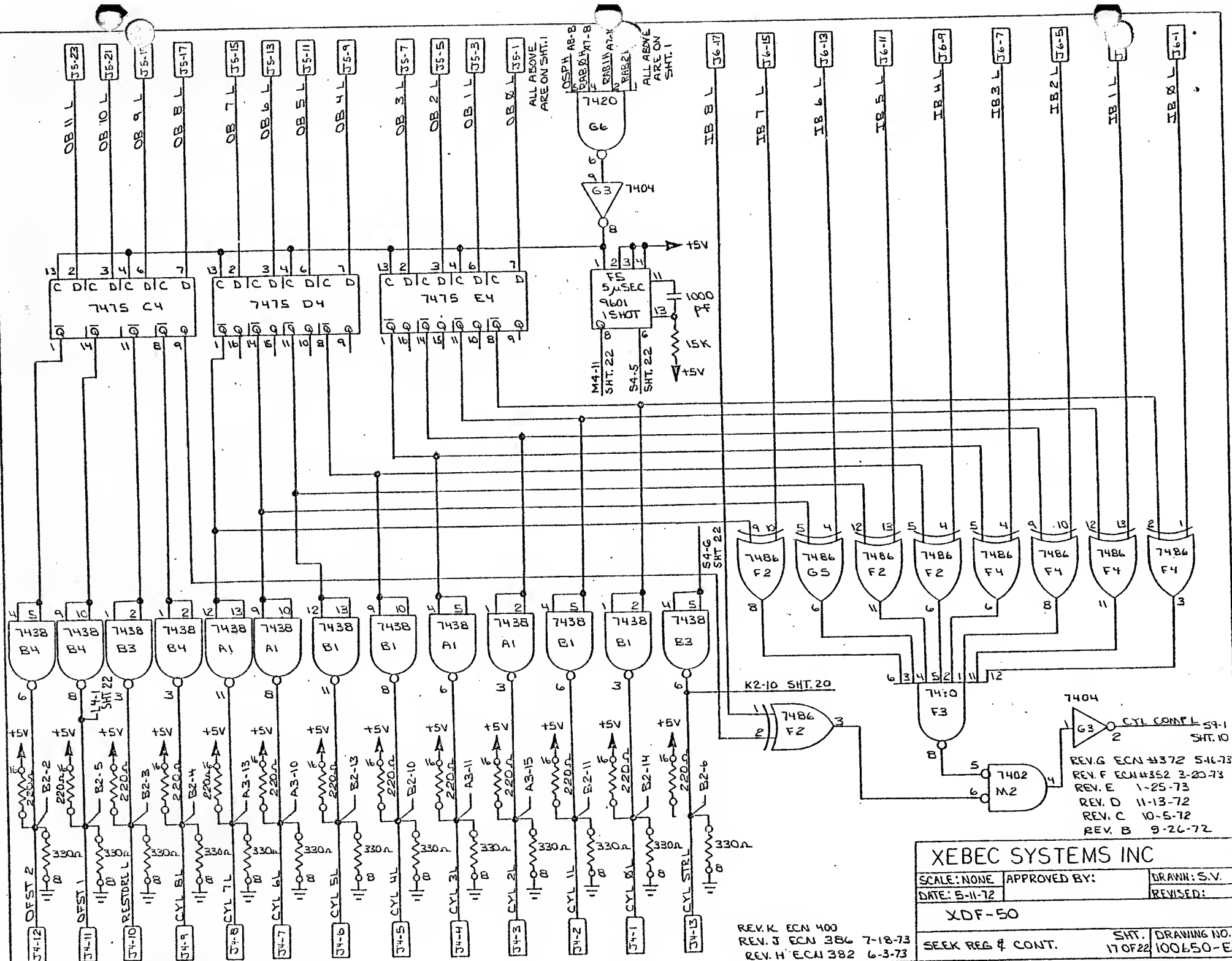
XEBEC SYSTEMS INC

SCALE: NONE APPROVED BY: DRAWN: S.V.
DATE: 5-12-72 REVISED:

XDF-50

SR & IB MUX SHT. DRAWING NO.
BITS 3-Ø & SERIAL STEERING 14 OF 22 100650-E





XEBEC SYSTEMS INC

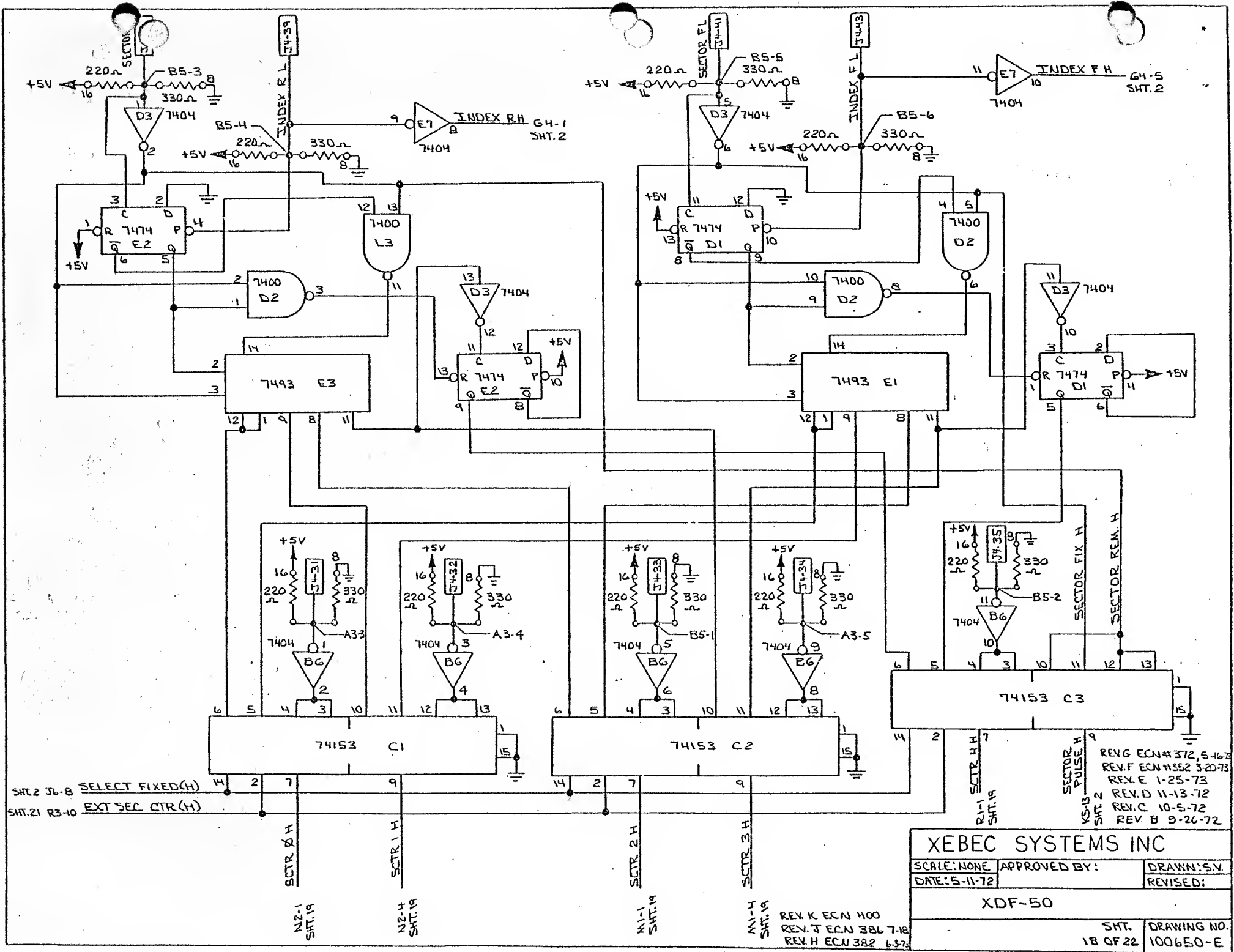
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DATE: 5-11-72		REVISED:

XDF-50

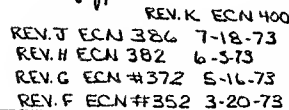
SEEK REG & CONT.

SHT.	DRAWING NO.
17 OF 22	100650-E

REV. K ECN 400
REV. J ECN 386 7-18-73
REV. H ECN 382 6-3-73



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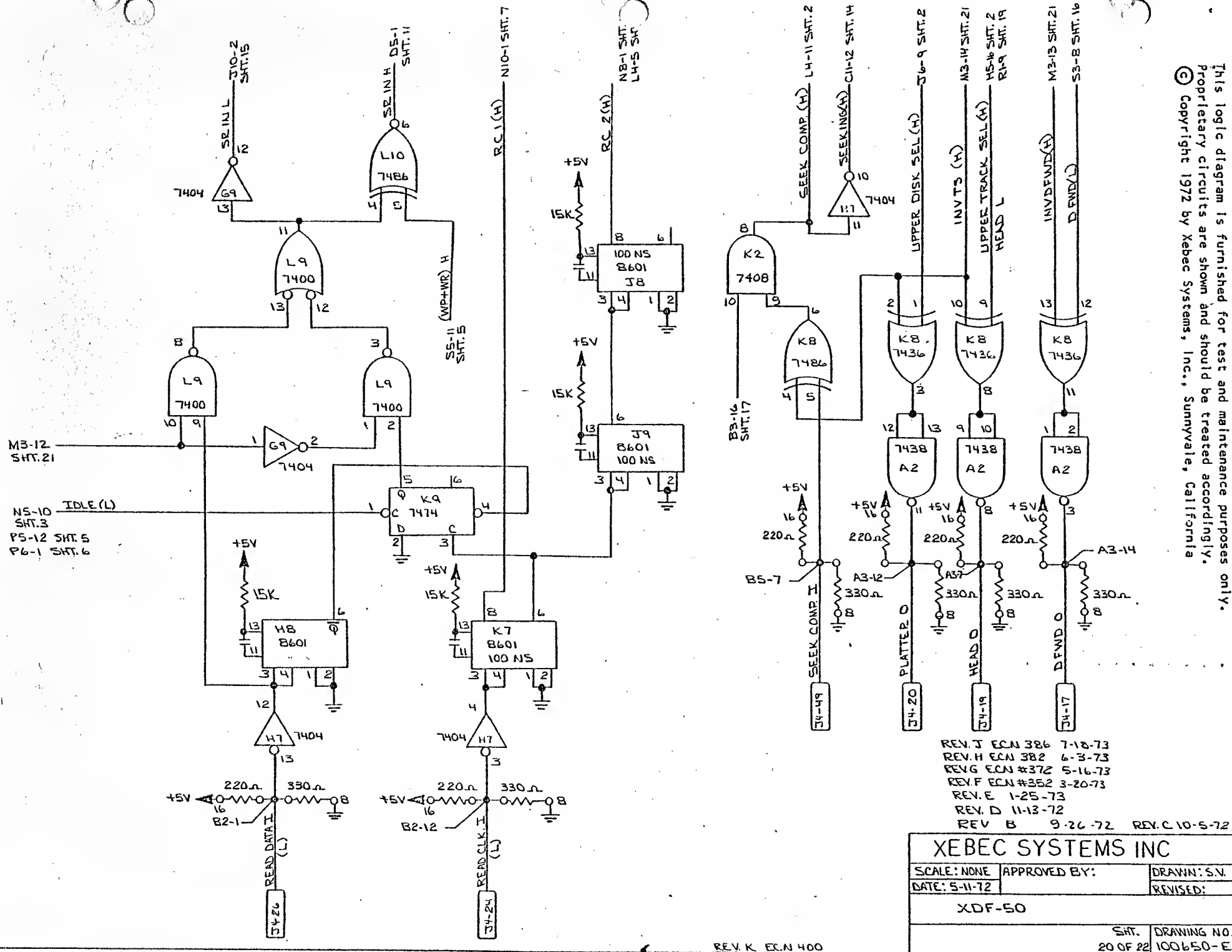


XEBEC SYSTEMS INC

SCALE: NONE	APPROVED BY:	DRAWN: S.V.
DATE: 5-1-72		REVISED:

XDF-50		
SECTOR CTR & COMP.	SHT.	DRAWING NO.
SECTOR PRE COMP.	19 OF 22	100650-E

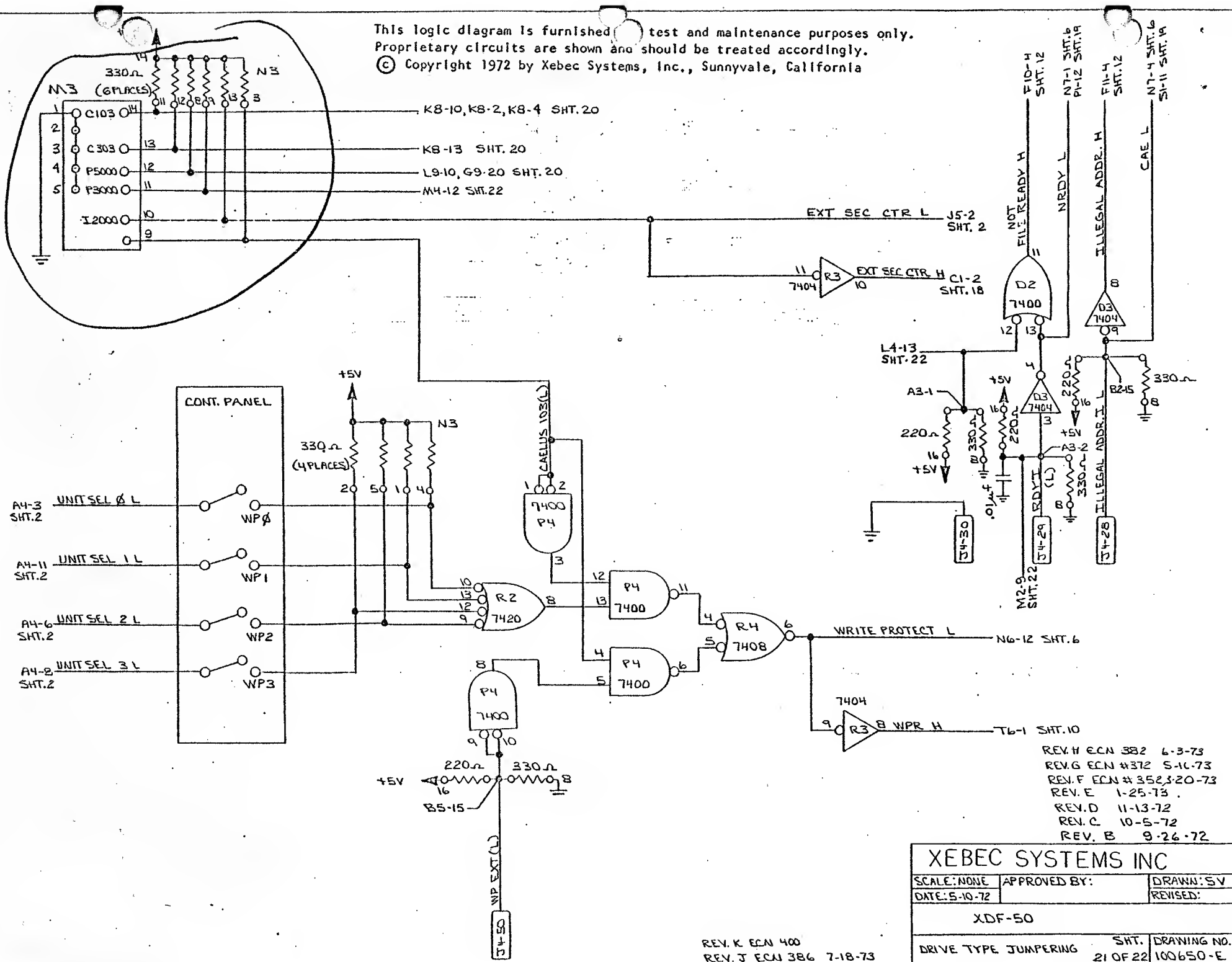
© Copyright 1972 by Xebec Systems, Inc., Sunnyvale, California

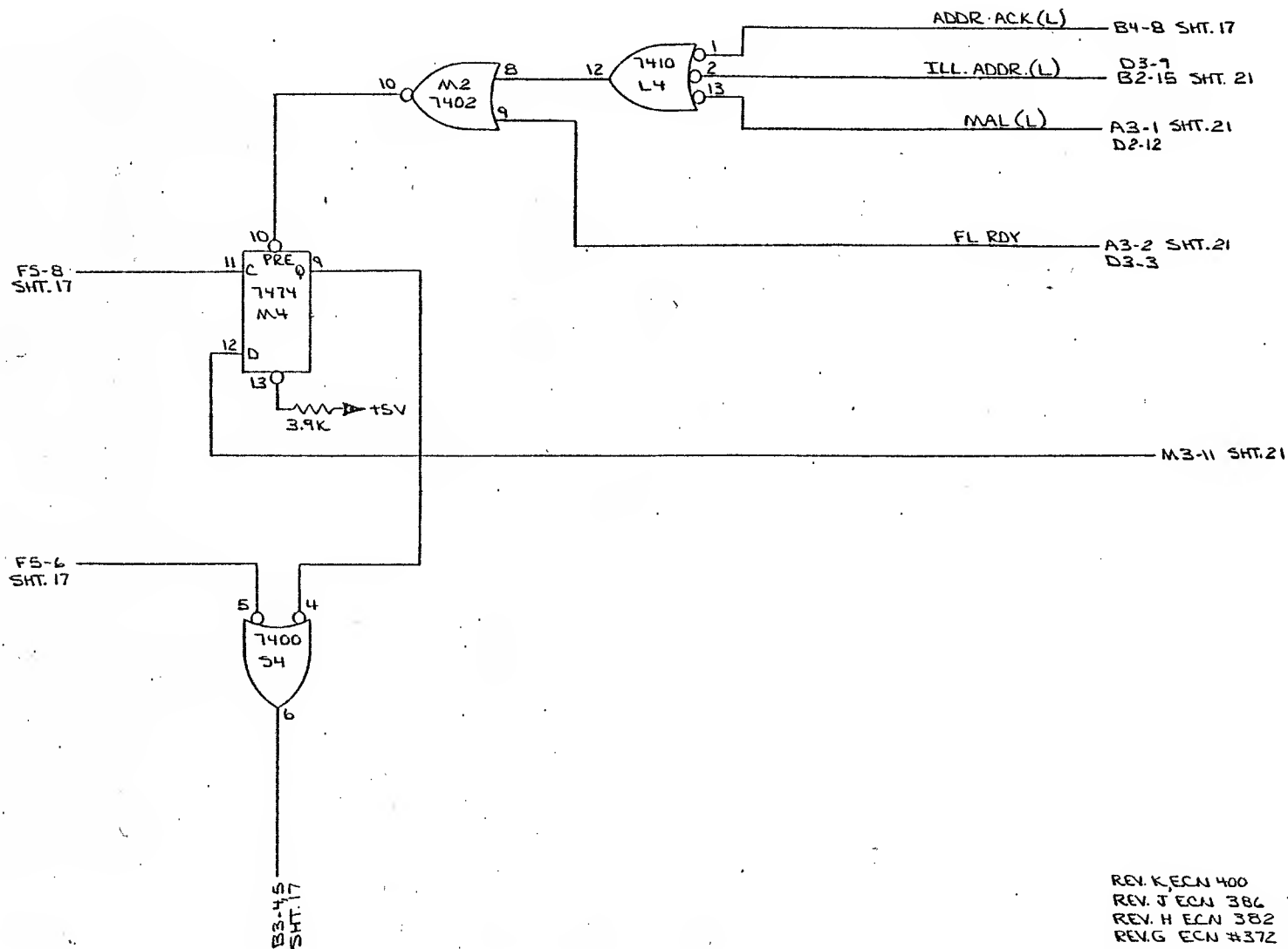


REV. J ECN 386 7-18-73
REV. H ECN 382 6-3-73
REV. G ECN #372 5-16-73
REV. F ECN #352 3-20-73
REV. E 1-25-73
REV. D 11-13-72
REV. B 9-26-72 REV. C 10-5-72

XEBEC SYSTEMS INC		
SCALE: NONE	APPROVED BY:	DRAWN: S.N.
DATE: 5-11-72		REVISED:
XDF-50		
SHT. 20 OF 22		DRAWING NO. 100650-E

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REV. K ECN 400
 REV. J ECN 386 7-18-73
 REV. H ECN 382 6-3-73
 REV. G ECN #372 5-16-73
 REV. F ECN #352 3-20-73
 REV. E 1-25-73
 REV. D 11-13-72
 REV. B 9-26-72 REV. C 10-5-72

XEBEC SYSTEMS INC

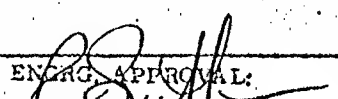
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DATE: 9-26-72		REVISED:

XDF-50

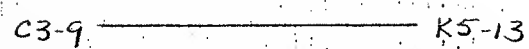
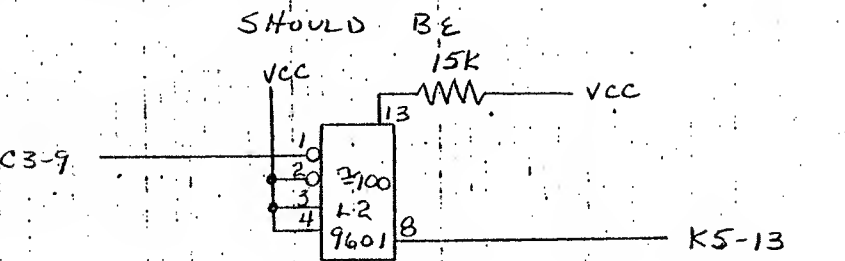
SHT.	DRAWING NO.
22 OF 22	100650-E

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 Proprietary circuits are shown and should be treated accordingly.
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XEBEC SYSTEMS, INC. 566 San Xavier, Sunnyvale, California		ENGINEERING CHANGE NOTICE			PRODUCT		SHEET 1 OF 1		ECN NBR. 451	
REASON FOR CHANGE: <i>TO PROPERLY REPORT RATE ERRORS.</i>		XPN <i>100650</i>		AFFECTS REV <i>K</i>	NEW REV <i>L</i>	TITLE <i>XDF-50</i>		FIELD CHANGES REQUIRED: <i>A/R</i>		
		OTHER DRAWINGS AFFECTED:			MFG'G INSTRUCTIONS:					
		DWG. NO. <i>100650</i>	SHT. TYPE <i>10 E</i>	<i>CHANGE ALL INHOUSE AND NEW MANUFACTURE</i>						
INTERCHANGEABILITY AFFECTED FIT? FUNCTION?										
DESCRIPTION OF CHANGE:										
<i>1. CUT TRACE T6-8 TO T5-5 & 10 (TOP OF BOARD AT T5-10)</i> <i>2. ADD WIRES</i> <i>P6-8 TO T5-5 & 10</i> <i>T7-6 TO P6-9</i> <i>A7-6 TO P6-10 (FEED THRU NEAR T7-13 & 14)</i> <i>A8-10 TO P6-11 (FEED THRU ABOVE T7-1)</i>										
ORIGINATOR: <i>R. STEIN</i>	DATE <i>11/26</i>	ENGRG. APPROVAL: <i>CJL</i>	DATE <i>11/26</i>	MFG'G APPROVAL:	DATE	FIELD SERVICE APPROVAL: <i>Charles W. Lott</i>	DATE <i>11/26/73</i>	ECN RELEASE DATE:		

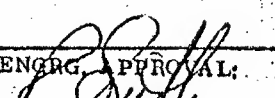
NEPEC SYSTEMS, INC. 566 San Xavier, Sunnyvale, California		ENGINEERING CHANGE NOTICE				PRODUCT XDF-50	SHEET 1 OF 1	ECN NO. 463
REASON FOR CHANGE: Change lamp driver to IC 7438		XPN 100650	AFFECTS REV. L	NEW REV. M	TITLE XDF-50		FIELD CHANGES REQUIRED: A/2	
		OTHER DRAWINGS AFFECTED:			MFG'G INSTRUCTIONS:			
		DWG. NO.	SHT. TYPE		All <u>new</u> production			
		100650-E	19 Logic					
INTERCHANGEABILITY AFFECTED FIT? NO FUNCTION? No		Assy. Rev. M						
		ARTWORK Rev. E						
DESCRIPTION OF CHANGE:								
<p>1. Remove Install IC 7438 at location P1</p> <p>2. Cut the following traces:</p> <p>PI-4 (comp side)</p> <p>PI-6 (comp side)</p> <p>PI-6 (ckt side)</p> <p>PI-8 (ckt side)</p> <p>PI-10 (comp side)</p> <p>3. Add the following wires:</p> <p>PI-9 to PI-10</p> <p>PI-4 to PI-2</p> <p>PI-2 to FT off R8-8</p> <p>PI-6 to FT off PI-4</p> <p>PI-8 to FT off PI-10</p> <p>4. On <u>new</u> taping: add 150 Ω resistor to GND on PI-3, 6, 8, 11</p> <p style="text-align: right;"><u>DRAFTING:</u></p>								
ORIGINATOR: P. L. ...	DATE 12/...	ENGINEER APPROVAL: 	DATE	MFG'G APPROVAL:	DATE	FIELD SERVICE APPROVAL:	DATE	ECN RELEASE DATE:

XEBEC SYSTEMS, INC. 566 San Xavier, Sunnyvale, California		ENGINEERING CHANGE NOTICE			PRODUCT		SHEET 1 OF 4	ECN NBR. 467
REASON FOR CHANGE: To INCORPORATE MODS. 100811, 100812, 100905 ON NEXT BUY OF BOARDS.		XPN 100650	AFFECTS REV. M	NEW REV. N	TITLE FORMATTER		FIELD CHANGES REQUIRED: A/R	
		OTHER DRAWINGS AFFECTED:			MFG'G INSTRUCTIONS:			
		DWG. NO.	SHT. TYPE		A/R by test.			
		100650 100651 100650	LOGIC ARTWORK REV. E 1 ASSY.					
INTERCHANGEABILITY AFFECTED FIT? FUNCTION?								
DESCRIPTION OF CHANGE: 1. To CONVERT ILLEGAL ADDRESS Pulses to A LEVEL NEEDED FOR STATUS REGISTER. a) Remove trace B2-15 to D3-9, N7-4, S1-11. (Leave B2-15 connected to L4-2) b) Remove trace D3-8 to F11-4. c) Add 'D' FLIPFLOP (SN7474) AT LOCATION F1. e) ADD TRACE B2-15 to F1-10. f) ADD TRACE K2-10 to F1-11. g) ADD TRACE D3-4 to F1-13. h) ADD TRACE F1-8 to N7-4, S1-11. i) ADD TRACE F1-9 to F11-4. j) ADD TRACE GND to F1-7, F1-12. k) ADD TRACE VCC to F1-14.								
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>WAS</p> </div> <div style="text-align: center;"> <p>SHOULD BE</p> </div> </div>								
ORIGINATOR: R. STEIN	DATE 1/2	ENGRG. APPROVAL: C. MEND	DATE 1/4	MFG'G APPROVAL:	DATE	FIELD SERVICE APPROVAL:	DATE	ECN RELEASE DATE:

XEBEC SYSTEMS, INC. 566 San Xavier, Sunnyvale, California		ENGINEERING CHANGE NOTICE			PRODUCT		SHEET 2 OF 4		ECN NO. 467								
REASON FOR CHANGE:		XPN 100650		AFFECTS REV. M		NEW REV. N		TITLE		FIELD CHANGES REQUIRED:							
		OTHER DRAWINGS AFFECTED:				MFG'G INSTRUCTIONS:											
		DWG. NO.		SHT. TYPE													
INTERCHANGEABILITY AFFECTED FIT? FUNCTION?																	
DESCRIPTION OF CHANGE: <p>2. To shorten sector pulse to $\approx 100\text{nsec}$</p> <ul style="list-style-type: none"> a) Remove trace C3-9 to K5-13 b) Add one-shot (9601) AT LOCATION L2. c) Add trace C3-9 to L2-1 d) Add trace L2-8 to K5-13 e) Add trace L2-13 to 15K resistor. f) Add trace GND to L2-7. g) Add trace VCC to L2-2, L2-3, L2-4, L2-14, 15K resistor. <div style="display: flex; justify-content: space-around; align-items: flex-end; margin-top: 20px;"> <div style="text-align: center;"> <p>WAS</p>  </div> <div style="text-align: center;"> <p>SHOULD BE</p>  </div> </div>																	
ORIGINATOR:		DATE		ENGRG. APPROVAL:		DATE		MFG'G APPROVAL:		DATE		FIELD SERVICE APPROVAL:		DATE		ECN RELEASE DATE:	

XEBEC SYSTEMS, INC. 566 San Xavier, Sunnyvale, California		ENGINEERING CHANGE NOTICE			PRODUCT		SHEET 3 OF 4		ECN NBR. 467			
REASON FOR CHANGE:		XPN 100650	AFFECTS REV. M	NEW REV N	TITLE		FIELD CHANGES REQUIRED:					
		OTHER DRAWINGS AFFECTED:			MFG'G INSTRUCTIONS:							
		DWG. NO.	SHT. TYPE									
INTERCHANGEABILITY AFFECTED FIT? FUNCTION?												
DESCRIPTION OF CHANGE: <p>3) To Allow SEPARATE HEAD PLATTER AND SEEK COMPLETE INVERSION.</p> <p>a) Change M3 to 16 pin configuration.</p> <p>b) Renumber per diagram</p> <p>c) Remove trace M3-14 to K8-4. (LEAVE M3-14 connected to K8-2, K8-10, N3-11)</p> <p>d) Add trace M3-16 to K8-4, N3-6.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;"> <p>OLD</p> </div> <div style="text-align: center;"> <p>NEW</p> </div> <div style="margin-left: 20px;"> <p>NOTE: OLD M3-1 thru 7 becomes New M3-2 thru 8.</p> <p>OLD M3-8 thru 14 becomes New M3-9 thru 15.</p> </div> </div>												
ORIGINATOR:		DATE	ENGRG. APPROVAL:		DATE	MFG'G APPROVAL:		DATE	FIELD SERVICE APPROVAL:		DATE	ECN RELEASE DATE:

XEBEC SYSTEMS, INC. 566 San Xavier, Sunnyvale, California		ENGINEERING CHANGE NOTICE			PRODUCT		SHEET 4 OF 4		ECN NO. 467	
REASON FOR CHANGE:		XPN 100650		AFFECTS REV. M	NEW REV. N	TITLE		FIELD CHANGES REQUIRED:		
		OTHER DRAWINGS AFFECTED:			MFG'G INSTRUCTIONS:					
		DWG. NO.		SHT. TYPE						
INTERCHANGEABILITY AFFECTED FIT? FUNCTION?										
DESCRIPTION OF CHANGE: 4. To shorten Read clocks and read clock delayed for proper operation @ 2400 rpm. a) change resistor @ K7-13 from 15k to 10k. b) change resistor @ J9-13 from 15k to 5.1k. c) CHANGE RESISTOR @ J8-13 from 15K to 10k. 5. To correct malfunction circuit. a) Remove trace A3-1 to L4-13. (LEAVE A3-1 connected to D2-12) b) Add trace B4-6 to L4-13.										
ORIGINATOR:	DATE	ENGRG. APPROVAL:	DATE	MFG'G APPROVAL:	DATE	FIELD SERVICE APPROVAL:	DATE	ECN RELEASE DATE:		

XEBEC SYSTEMS, INC. 566 San Xavier, Sunnyvale, California		ENGINEERING CHANGE NOTICE				PRODUCT XDF-50		SHEET 1 of 1		ECN NBR. 480	
REASON FOR CHANGE: TO IMPROVE PRODUCT CONSISTENCY WITH VARYING VENDORS.		XPN 100650		AFFECTS REV. N		NEW REV. P		TITLE XDF-50		FIELD CHANGES REQUIRED:	
		OTHER DRAWINGS AFFECTED:		MFG'G INSTRUCTIONS:							
		DWG. NO.		SHT. TYPE							
INTERCHANGEABILITY AFFECTED FIT? FUNCTION?		100650-E 100650		20 1		LOGIC ASSY.		MODIFY ALL P.C. BDS. IN TEST, STOCK & HOUSE.			
DESCRIPTION OF CHANGE:											
1. CHANGE VALUE OF TIMING RESISTOR ON H8-13 TO BE 5.1K 2. ADD 27 P.F. CAP. BETWEEN H8-11 & H8-13. 3. CUT TRACE T3-2 TO T3-13. 4. ADD WIRE T3-2 TO T3-1.											
ORIG. N/A. OR:	DATE	ENGRG. APPROVAL:	DATE	MFG'G APPROVAL:	DATE	FIELD SERVICE APPROVAL:	DATE	ECN RELEASE DATE:			
2/2/74			2/11								